



Model CHW

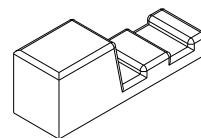
Operation

After installation, setting the power switch to "ON" activates the control. The four-line LCD display indicates the various modes of the control, sensed temperatures, burner run time, and any warning messages. The *IntelliCon*[®] -CHW will monitor the boiler water temperature with a sensor(s). These sensors are strapped to your heating system pipes and insulated. When the burner is called to run, the *IntelliCon*[®] will interrupt that signal and delay the burner from firing, thus extracting the most amount of heat from the water before using fuel. The sensor(s) monitor the rate at which the water temperature drops to dynamically adjust a new start point for the burner. This results in less boiler on/off cycling and allows the burner to run longer at a much more efficient heat transfer.

LCD (Message) Screen

On-Off/Bypass Switch

Power/Fault Indicator LED



Temperature Sensor

First-Line Display Messages & Meanings

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
BURNER HRS: 016323.7
```

The boiler's operating control is satisfied and does not require the burner to run.

```
ECONOMIZER MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
BURNER HRS: 016323.7
```

The burner is requested to fire, but the *IntelliCon*® senses there is available heat to be used before burning fuel, so it delays the start.

```
HEATING MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
BURNER HRS: 016323.7
```

The burner is running.

```
HEATING / LO LIM
  SPLY  DOM.  RTN.
  135°  135°  145°
BURNER HRS: 016323.7
```

The operating control switched the burner on (the burner is running) due to an increase in load. The pressure and/or water temperature at the sensor is below the heating low limit setpoint.

Second & Third-Line Display Messages & Meanings

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
BURNER HRS: 016323.7
```

SPLY - Heating Water Temp: The temperature measured by the boiler outflow water sensor.

DOM. - Domestic Water Temp: The temperature measured by the domestic hot water outflow sensor is displayed in degrees F or C.

RTN. - Return Water Temp: The temperature measured by the boiler return water sensor is displayed in degrees F or C.

NOTE: "N/U" indicates no sensor was detected during power-up.

Fourth-Line Display Messages & Meanings

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
INST SAVE = xx. x
```

The calculated savings of the last complete burner cycle. If the value cannot be calculated, this item will not be displayed.

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
AVG SAVE = xx. x%
```

The calculated average savings of all valid burner cycles since commissioning of the controller. The numeric value will not be displayed until a value that is greater than 0.1 is calculated.

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  135°  145°
ET HOURS = xxxxx. x
```

Total accumulated economizing time.

```
STANDBY MODE
  SPLY  DOM.  RTN.
  135°  FAIL  145°
RT TIME = xxxxx. x
```

Total accumulated burner run time.

Troubleshooting

After installation and checkout, the controller does not require maintenance. If you have no heat and/or hot water, locate the power switch on the front of the *IntelliCon*® and place switch to “OFF/BYPASS”. The LCD screen will go blank meaning the *IntelliCon*® is no longer in the boiler control circuit. If your boiler doesn’t start then, there is a problem with boiler and you should call your boiler service company. If it does start, leave it in “OFF/BYPASS” and call your installer.

If the message “TIMER FAULT” is displayed, the switch should be placed in the “OFF/BYPASS” position and service called.